## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 202554

In the Matter of	)	
	)	
Emergency Alert System Rules	) 47 CFR Volume 1, Chapter 1, Part §	1
§11.56 CAP-formatted alerts[180-day	clock]) [FCC 07-109] Docket No. 04-296	
Establish an EASAC	)	
Expedited EAS Rulemaking	)	
2	)	

To: The Commission

#### **Petition for Rulemaking**

Randy D. Gehman, a previous Licensee of broadcast stations, previous Chairman of multiple States Emergency Communications Committees, the Author of State EAS and EBS Plans approved by The Commission and presently the Owner of Gehman Compliance & Consulting {GC&C}, a Professional Broadcast Management and Engineering Consultant, Public Warning System Integrator/Trainer and Alternate Broadcast Inspection Program Inspector; hereby respectfully submits a Petition for 'Expedited Rulemaking' [PERM] requesting that The Commission consider updated information that was not available or presented during proceeding EB Docket No. 04-296; requesting that The Commission;

- A. Immediately set-aside Rule §11.56 {the 180-day 'clock'} mandating the installation of EAS-CAP to EAS-SAME translating equipment.
- B. Charter an Emergency Alert System Advisory Committee [EASAC] modeled after the Commercial Mobile Service Alert Advisory Committee [CMSAAC] structure and task this FCC 'EASAC' with developing an EAS-CAP end-user-interface and proposed CAP-to-Air EAS Rules no later than January 1, 2011.

C). Establish a new Rulemaking to review the proposed CAP-to-Air EAS Rules that are sure to result from an FCC 'EASAC' and adopt those EAS Rules by June 1, 2011, to enable a true next-generation advanced EAS-CAP schema and the retirement of EAS-SAME, with an effective date of January 1, 2012.

Having been active in Broadcasting since 1970; having trained several hundred EOC Watch Officers on the 'EAS origination decision sequence' procedures; having personally pioneered the concept of compliance inspections of broadcast stations for State Broadcasters

Associations in 1990 and having completed well over two-thousand such 'audit/compliance inspections' at Radio, Television and Cable Television facilities to-date; R. Dale Gehman holds a unique 'real-world' overview of the design flaws, limitations and failures of EAS-SAME and its predecessors; I hereby urgently request that The Commission carefully and in a most timely manner consider this Petition.

Unless The Commission acts promptly to set-aside Rule §11.56, all of the FCC's Broadcast and Cable Licensees will face a costly and very pre-mature deployment of the CAP-to-SAME translation equipment mandated by existing EAS Rules. Rule§11.56 requires the purchase and installation of equipment to receive a Common Alerting Protocol [CAP] formatted public warning message and convert it to the Specific Area Message Encoding [SAME] format currently used by the Emergency Alert System [EAS]. This new equipment must be purchased and installed within 180-days of the date that FEMA/DHS adopts 'CAP'.

It must be noted that almost two years have passed since the EAS Proceeding EB Docket No. 04-296 and the modified Rules [FCC 07-109] and yet today even in a 'best care scenario' it is estimated that the earliest operational phase of the FEMA/DHS Integrated Public Alert and Warning System [IPAWS] to transport CAP Public Warnings at the Federal, State and Local Levels will not occur until at least January 1, 2012. Mandating that Broadcast and Cable facilities must purchase an EAS CAP-to-SAME translation device at any date prior to the actual operational status date of IPAWS is illogical, unsound at best and imposes a financial liability on Licensees during depressed economic conditions by requiring Radio, Television and Cable facilities to purchase and install a new system to receive IPAWS CAP transmissions several years before IPAWS can possibly be operational!

Due to the amount of time that will be required for IPAWS security and reliability testing at the laboratory level and the actual national build-out of an IPAWS delivery system, Rule \$11.56 must be set-aside. Further, the training of Federal, State and Local Emergency Management's Emergency Operation Centers [EOCs] on the data entry procedure and authentication requirements for CAP compliant origination of Public Warnings must be accomplished prior to any mandated 'install date' by which Broadcast and Cable facilities must purchase and install CAP reception equipment that must be backward compatible and translate CAP back to the existing EAS-SAME format. The Commission should not require Broadcast and Cable facilities to install equipment for CAP message reception at any point prior to a truly functional IPAWS; otherwise, the Rules are mandating compliance with a system that does not yet exist and with a high probability that the IPAWS structural and

operational design will end up significantly revised as compared to the present IPAWS EAS-CAP proof-of-concept being developed by FEMA/DHS Contractors!

I find it unfathomable that The Commission would fail to act immediately to set aside Rule §11.56 and thereby effectively stop the existing rush-ahead to 'Type-Acceptance' design testing by manufactures of CAP reception and translation to EAS-SAME equipment – in an honest effort to be ready for the 180-day-clock that will be triggered of the adoption of the CAP 'profile' by FEMA/DHS. Adoption of the CAP by FEMA/DHS will be several years prior to the completion of a final design and build out of the IPAWS CAP entry and CAP delivery system. I believe significant design modifications and enhancements will be added to IPAWS during the initial concept testing and build out that and any such 'enhancements' would not be included in any CAP receiver type-accepted immediately after FEMA/DHS formally adopts CAP. For example; for a true advancement in Next-Generation EAS Public Warning Dissemination, the IPAWS delivery of a CAP Public Warning Message must also trigger a return 'receipt' via the IPAWS delivery path from the CAP receiver device at each Broadcast and Cable facility. A return 'receipt' would then populate the originating EOC's CAP entry terminal screen as verification of delivery and another receipt upon the actual transmission of the CAP Public Warning by the Broadcast or Cable facility. The lack of any confirmation of delivery of an EAS-SAME activation is one of the inherit design faults of the existing EAS since EOCs have no way to know if any facility received the EAS Event Activation and certainly no way to know if the Public Warning was actually transmitted.

The basis for this 'Petition for Expedited Rulemaking' and my inherent request that The Commission set-aside the existing Rule [§11.56]; is the critical need for the development of a true logical and effective transition roadmap to achieve EAS-CAP 'direct-to-air' with the end result being the retirement of the present EAS-SAME coding schema by January 1, 2012, in order to accomplish a true improvement in the Emergency Alert System. By developing new EAS Rules thru an FCC 'EASAC' Broadcast and Cable facilities will be authorized to the utilize the very accurate data and attachments contained in a CAP formatted Public Warning Message 'direct-to-air' instead of dumbing the warning information down to an EAS-SAME format. CAP 'direct-to-air' will be a true next-generation advancement in both accuracy and effectiveness of Public Warning dissemination.

By retiring EAS-SAME at a specific date [January 1, 2012 is recommended as an EAS-SAME retirement date] Radio facilities will be able to take a CAP warning message file's audio message attachment and present it direct-to-air without any obtrusive audio data-bursts or audio signaling other than a standardized 'attention signal' for those with disabilities. If EAS-SAME is retired, Television facilities and take the CAP warning message file's audio and text/video message attachments and present them direct-to-air without any obtrusive audio data-bursts or audio signaling other a standardized 'attention signal' for those with disabilities. SEE EXHIBITS: A, B and C

Further, the next generation CAP receivers for Radio, Television and Cable facilities must be capable of comparing a coordinate polygon of that specific facilities actual local coverage area or franchise area with the received CAP warming message's coordinate polygon of the

specified warning area. If the Broadcast or Cable facilities actual local coverage area or franchise area does not overlap with the CAP Warning Message's coordinate polygon of the specified warning area – the message would not go-to-air. The EAS-SAME's inherit 'County-by-County' and 'Stock Event Code' concept is wildly inaccurate and misleading to the General Public; however, until the OASIS Group's development of the Common Alerting Protocol to standardize Public Warning data entry at the EOCs and the FEMA/DHS's IPAWS for CAP distribution, Broadcast and Cable facilities did not have access to accurate information or any equipment that could make a determination based on the facilities local coverage area or franchise area vs. the actual desired warning area.

By establishing an FCC 'EASAC' tasked with the development of a CAP end-user-interface design requirement and related proposed Rules – The Commission will facilitate a true next generation upgrade of the Emergency Alert System (EAS) and the net result will create the most significant advancement for both Broadcast and Cable Licensees and the Emergency Management Community since the Electronic Media became engaged in Public Warnings in the original CONELRAD era.

## 1. FEMA/DHS's IPAWS – At Least Two Years Until Operational Status

- 1). EAS Rule §11.56 must be suspended until such a point that FEMA/DHS has adopted CAP and;
  - a). has completed the initial design concept testing of IPAWS
  - b). has completed the national build-out of IPAWS
  - c). has completed security and operational testing of IPAWS

- d). has successfully transported CAP formatted Public Warning Messages that originated at the Federal, State and Local EMA origination points.
- e). has released a final design specification to equipment manufactures for CAP

  Public Warning origination and reception equipment for needed enhancements

  such are return 'receipts' from all CAP receivers for verification to the EOCs.

The preceding must be accomplish before the start of any EAS Rule imposed 'installation clock' so that all new equipment purchased will successfully communicate with the final built out schema of IPAWS.

The adopted Rule §11.56 has created a great deal of confusion to The Commission's Licensees and Equipment Manufacturers as they were initially concerned with how to obtain equipment within the short timeline due to an expectation that FEMA/DHS would be adopting CAP within months after the EAS Rule was adopted. The real-world result of the Rule has been a virtual shut-down of any efforts for the improvement in State EAS Plans, Licensees have postponed replacement of EAS equipment that is in very poor condition and capital budget planning for the new CAP complaint equipment in is a state of confusion. This situation has not been helped by very inaccurate advertisements targeting Radio, Television and Cable facilities by equipment vendors who are marketing EAS 'CAP Compliant' equipment even before the FEMA/DHA IPAWS delivery specifications have been established and The Commission's own Type-Acceptance Requirements have been adopted.

### 2. Accuracy of an EAS Public Warning Transmission Must be the Focus

2). It is critical that The Commission understand the previous EAS Improvement Proceeding EB Docket 04-296 [FCC 07-109] did not alter or improve the actual over-the-air broadcast of a Public Warning Event by a Radio, Television or Cable facility. In-fact, the net result of the entire EB Docket 04-296 proceeding was to mandate that Licensees must purchase new equipment to receive CAP formatted warning messages; however, instead of allowing the Licensees to utilize the many benefits of accuracy and detail in the CAP Public Warning message, the Rules require that CAP messages be translated back to an 1994 EAS-SAME schema!

It is interesting to note that EB Docket 04-296 did not explore even basic concepts available for adding more intelligence into the bit length or byte data in the EAS header / closer. At a minimum, if EAS 'SAME' must be maintained – an updated design should have been accomplished in the proceeding that would have enabled 'SAME' to transport polygon data thereby solving one of the many problems with EAS-SAME. The net end result of this proceeding is that Broadcast and Cable facilities are mandated to transmit Public Warnings under the existing EAS-SAME schema adopted in the 1994 EAS Rules without any improvement in the accuracy or effectiveness in the dissemination of a Public Warning!

Under the present EAS Rules, once FEMA/DHS adopts CAP, within 180-days a Broadcast or Cable facility must be capable of receiving a CAP formatted message, and must then dumb it down from the CAP file's accurate polygon specified warning area and the CAP file's exact warning event detail and instead convert it to the EAS-SAME County & Event

Code format. This dumbed-down SAME message would then be transmitted and will contain the same exact inaccurate location and event code information that has plagued EAS-SAME since its adoption in 1994 EAS Rules! 180-days following the date that FEMA/DHS will have actually adopted CAP – the actual Public Warning transmission by a Radio, Television or Cable facility will not have been advanced in any manner – still transmitting the warning via EAS-SAME to a most inaccurate geographical area – still sending the General Public the wrong and misleading warning event information – all at a significant cost to the Licensees for new equipment that in-fact does not result in a net improvement in the Public Warning dissemination or effectiveness.

Further, the Rule §11.56 guarantees a very pre-mature installation of costly equipment that must be paid for by the Broadcast or Cable facility – new equipment designed to receive CAP formatted messages via a system that does not yet exist! [IPAWS does not exist even at a final proof-of-concept design level, let alone at an implementation or verified testing of concept level.] The focus of the proposed EASAC should be to develop a set of requirements for a CAP end-user-interface for Broadcast and Cable, thereby utilizing the accuracy of a CAP formatted warning message direct-to-air. {Retiring the EAS-SAME schema}

#### 3. The EAS-SAME Schema is Wildly Inaccurate and Misleading to the Public

3). The overall EB Docket 04-296 proceeding was errant in not addressing the inaccurate and misleading information transmitted by Broadcast and Cable facilities due to the inherit limitations of EAS-SAME. Specific Area Message Encoding must by its design specify a

County FIPS code – regardless of how geographically large or small. Further, SAME requires a 'stock' Event code to be transmitted so that a SAME decoder will activate if that Event code has been selected. The existing EAS-SAME encoder/decoders produce a text string upon activation that displays; The Originator ID, The County Name, The Event Code Title, The Time of Duration of the Public Warning Event. Not only is this typically wildly inaccurate information, the General Public is in large part receiving yet another warning that is not applicable to their specific location. I must point out that the EAS-SAME decoding of Broadcast or Cable facilities has not been adopted by any consumer device presently in use. SEE EXHIBITS: D (1 and 2) and E (3 and 4)

## 4. Consumer Devices Will Likely Never Exist that will Activate upon EAS-SAME Transmitted by a Broadcast or Cable Facility

4). There will likely never be a consumer device that activates upon a Broadcaster or Cable facilities EAS-SAME data burst transmission since the SAME data burst information only provides the County FIPS Code and the Stock Event Code. EAS-SAME's limited data does not have the warning location granularity or the warning event accuracy that would be acceptable to the general public for inclusion in automated consumer devices. There is a valid reason that consumer devices have not been developed and marketed with this feature since the EAS-SAME Rules in 1994. Can you imagine the consumer revolt that would occur if an EAS-SAME Public Warning is transmitted...at for example 2AM in the morning...and their radio, TV or other consumer device was capable of turning on automatically with a warning that does not even pertain to their area of the County! The desired warning area accuracy of the of the Public Warning Event itself is the most significant flaw of the EAS-

SAME schema as under the current EAS Rules all Licensees are still required to broadcast an EAS-Specific Area Message Encoding [SAME] header/closer data burst. EAS-SAME is a 'closed-circuit' system that is monitored only by FCC Licensees – not one consumer device exists that utilizes the EAS-SAME data bursts.

NOTE: A limited percentage of the total NOAA Radio receivers held by consumers trigger from an EAS-SAME transmission but it must be noted these NOAA-EAS-SAME receivers can only receive and trigger from EAS-SAME coding transmitted by NOAA Radio station frequencies. The devices are incapable of tuning to and triggering from Broadcast Radio Station EAS-SAME transmission. Just as NOAA Radio continues to transmit their original 1050 Hz alert tone today in order to cover the early vintage of NOAA Radios, they will also likely maintain their closed circuit EAS-SAME in addition to their new NOAA-CAP distribution. Therefore, there will be no detrimental impact created if Broadcast the Cable facilities are permitted to use EAS-CAP direct-to-air and are release from any EAS-SAME requirement.

With the proliferation of smart consumer devices referencing GPS datum it will become a most desirable feature to include automatic Public Warning notification systems in consumer devices as long as those devices can be provided with the CAP warning message from The Commission's Licensees. A CAP warning message's desired warning area coordinate polygon could easily be transmitted by an FM station's HD Digital Data Channel or RDBS. Television stations have incredible data casting bandwidth and could transport the entire CAP warning message including attachments if encouraged to do so. A consumer device

utilizing an internal data zip code subset or with an external GPS location reference can easily be instructed to automatically tune the device even when in a standby mode to monitor stations in any given area that are transmitting CAP warning message data. This important Public Warning feature is easy to accomplish - similar to the existing GPS navigation devices which automatically tune a dedicated receiver to a specific station's subcarrier for traffic data in the area where the GPS unit is physically located at the moment.

## 5. The Daisy-Chain Off-Air Monitoring Is A Failed Concept

5). The concept of off-air monitoring for EAS is a carry-over from the original CONELRAD and EBS systems. The off-air daisy-chain relay concept was adopted by the FCC during an era when commercial satellites did not yet exist and it was a logical less expensive solution to wired Telco circuits between stations. With Internet access now required for normal business operations at Broadcast Radio, TV and Cable Facilities and with digital satellite packet data, digital television data casting and other wired and wireless data sources easily accessible at Broadcast and Cable facilities, there is no logical basis to continue to hold one broadcast facility or a series of broadcast facilities across a State, solely responsible to relay to all other broadcast facilities any warning information that is critical to Public Safety.

All Broadcast Radio, TV and Cable Facilities must be provided with Public Warning

Messages instantly and without being held hostage to any other station's relay of that

warning event. CAP formatted Public Warning Messages transported via the IPAWS

delivery system will accomplish a direct and instant delivery of Public Warning Messages by

utilizing diverse delivery paths thru IPAWS such as the Internet, Satellite packet data, DTV data casting, and Wired and Wireless local digital relay CAP networks.

#### 6. The Commission Adopted Rules for an EAS 'HYBRID' Schema – It Will Fail

6. The existing Rules force Broadcast and Cable facilities to operate a 'Hybrid EAS Schema' in which the EAS device at the facility must be able to receive both the IPAWS CAP delivery and yet must continue to monitor the existing LP-1 / LP-2 EAS-SAME transmissions. This 'Hybrid Schema' mandates that warning messages must be translated {dumbed down} from the Common Alert Protocol [CAP] message format as received via IPAWS into a Specific Area Messaging Encoding [SAME] for each EAS transmission. The mandated CAP to SAME EAS translation and 'hybrid' concept is flawed and will result in extreme confusion by Emergency Management Warning Originators and by Broadcast Radio, Television and Cable Systems Licensees due to the inevitable duplicate event lockdowns.

Duplicate lockdowns for a common EAS Public Warning event has already been an issue with the advanced EAS Networks deploy in numerous States. The advanced EAS Networks monitor the NOAA national datum stream and instantly transport the NOAA Public Warning Message to the local Broadcast and Cable facilities where participants have experienced duplicate lock-downs from also monitoring the local NOAA Radio facilities. We found that NOAA's local area radio transmissions are encoded with a differing SAME time stamp as compared to the time stamp encoded via the national NOAA warning datum stream and CAP transmissions.

### 7. Establish an Emergency Alert System Advisory Committee in January 2010

7). GC&C urges The Commission to order the creation of an Emergency Alert System Advisory Committee with a strict timeline for the creation and adoption of a new fully compliant EAS-CAP system and development of proposed EAS Rules. This EASAC concept is similar to the Commercial Mobile Service Alert Advisory Committee on which Randy D. Gehman served as a Member. The need for an Emergency Alert System Advisory Committee [EASAC] is most evident from the fallacies inherit in the adopted Rules from the EB Docket No. 04-296 proceeding.

The Commission should task the EASAC with at a minimum solutions for the following;

- a). Develop a CAP 'End-User-Interface' Concept with Basic Specifications
- b). Develop Proposed Rules for a transition to EAS-CAP 'direct-to-air' and the retirement of EAS-SAME at a specific date. [January 1, 2012 is a logical date to Coincide with the operational status of the Commercial Mobile Service Alert System and FEMA/DHS's IPAWS CAP delivery system.]
- c). Develop a formal Structure and Proposed Rules to legally establish the functions of the 'State Emergency Communications Committees' [SECC]. Action is required to resolve the absence of any Federal or State Statute that actually grants a SECC any authority to operate or regulate. Presently the SECCs can not reference any authority granted in the FCC Rules or any Federal or State

  Law or Statute. A proposed SECC Rule should contain specific requirements covering the make-up of the SECC, the term limits of the Chair and Members, the appointment procedures and SECC oversight by the authorizing Agencies.

With the EAS Rules now mandating that upon CAP adoption by

FEMA/DHS – all State EAS Plans must be in compliance with their own

Governor's list of mandatory EAS Events that must be broadcast in the State – if
the SECCs continue to exist as a fictitious authority based on a legendary concept
without any legal basis or authority – SECCs do not have the authorization to
mitigate the Governors EAS requirements.

[Prior to the 1994 EAS Rules – SECC members were appointed by the FCC Defense Commissioner. However, historically there was never any direct SECC authority granted or defined in the Federal or State Code and instead the SECCs operated as a quasi formal Public-Private Partnership with the FCC and reported problems to The Commission for enforcement.]

I recommend that The Commission structure the proposed EASAC membership to be so comprised that no more than one-fifth of the membership represents any one category of the following;

- a). Federal and State Agencies / Associations
- b). Broadcast and Cable Owners / Associations
- c). CAP-OASIS Group / EAS Equipment Manufacturers / EAS Network Providers
- d). SECC Chairs / Engineering Societies of Broadcast, Cable and IT
- e). Tribal Representatives / Media Accessibility for the Disabled Experts / Trainers

  Randy D. Gehman herein expresses a sincere interest to serve on such an EASAC and hereby

  commits the time and resources required to actively participate in the FCC's Emergency

  Alert System Advisory Committee.

#### 8. Adopt a CAP Direct-to-Air EAS System to Replace EAS-SAME

8). GC&C fully supports of The Commission's requirement that Public Warning Messages thru the FEMA/DHS IPAWS delivery system in the Common Alert Protocol {CAP} format must be received by Radio, Television and Cable facilities. CAP provides the Emergency Management community with the ability to enter unique and extremely detailed information on a Public Warning event into a national/internationally standardized format with the ability to continually update information related to that warning occurrence. Once the FEMA/DHS IPAWS delivery system is operational, CAP will enable many new methods for immediate dissemination of Public Warning Messages automatically into all modern communication systems. SEE EXHIBIT 'C'

For The Commission to mandate in the EAS Rules [FCC 07-109] that Broadcast Radio, TV and Cable Facilities must receive CAP formatted Public Warning Messages but then to require that those accurate CAP message to be translated {dumbed down} to EAS-SAME is nonsensical. To mandate that The Commission's Licensees must continue to transmit in the 1994 adopted EAS-SAME format and thereby transmit inaccurate and very miss-leading warning information once Emergency Management is outputting and IPAWS is transporting comprehensive CAP data on a warning event – the current EAS Rules do not facilitate or permit an improvement of Public Warning dissemination! The existing hybrid CAP to SAME EAS Rule is like trying to fit a basketball into an eight ounce coffee cup.

The unique ability inherit in the CAP standard in which an event is categorized by Emergency Management EOCs using a variety of the combinations of; a). Urgency, b). Severity and c). Certainty – is not relatable accurately to EAS-SAME's Event Codes in any manner. Having personally trained several hundred EOC Watch Officers on the EAS origination thought process and procedures I have serious concerns with the difficulty the present EAS Rules imposed on EOC Watch Officers. Due to The Commission's mandate that EAS must continue to operate with the 1994 SAME schema the CAP data entry Graphical User Interface terminal window must now include an EAS-SAME event code entry box. [An EAS-SAME Event Code input entry block was not part of the original OASIS Group's CAP version 1.1 but was only added for compliance with the Rules.] Forcing an EOC Watch Officer to also make a sidebar decision as to which of the many EAS-SAME event codes most closely agrees with the Public Warning occurrence currently underway immediately corrupts the accuracy of the CAP file as it is highly unlikely any 'stock EAS event code' will exactly match the actual Public Warning Event.

Further, CAP has a very desired ability to present a 'polygon' of coordinates that accurately specifies the area to be warned which will be totally lost in the translation from CAP to SAME since SAME is based on County FIPS codes. Unfortunately, the 'polygon' to 'FIPS' translation from CAP to SAMNE will continue the present 'cry wolf syndrome' where only a small portion of the County is physically located in the desired warning area but yet the General Public throughout the County receives a high level inaccurate warning.

CAP will be a significant advancement for Public Warning data entry and dissemination and CAP must not be strangled only at the Broadcast and Cable facilities by forcing a CAP translation back into the 1994 SAME schema. CAP also provides intelligent text for the

Public Warning Event in with multiple languages and multiple methods of warning those with disabilities as compared to the existing type accepted EAS equipment's text crawl which contains only the EAS Event Code, FIPS Code and Date/Time. Converting a CAP warning message into an EAS-SAME message will continue the inaccurate and misleading text crawl as currently plagues EAS. SEE EXHIBITS A, B and C

#### 9. Future EAS Failures Can Be Avoided – Abandon EAS-SAME – Adopt EAS-CAP

9). The Commission has a unique opportunity to update the adopted EAS Rules [FCC 07-109] from the EB Docket No. 04-296 proceeding. Due to the extended amount of time required for the FEMA/DHS IPAWS delivery system to be built-out and pass operational and security readiness testing, The Commission has at least two-years (2 years) to complete a new EAS Rulemaking. The first step must be to set aside Rule §11.56 until at least January 1, 2012. Further, there is sufficient time for the establishment of an 'EASAC' in January, 2011, with a maximum one-year (1 year) charter and to tasked the EASAC with developing a CAP End-User-Interface and the associated proposed Rules for the retirement of EAS-SAME as outlined above.

With prompt consideration of this Petition...The Commission will facilitate a second chance to accomplish a true Next-Generation advancement of EAS and avert future failures of EAS which already has a long-term history of Public Warning System failure. A true next-generation Emergency Alert System is achievable if it is designed around CAP entry and CAP transmission of all Public Warnings and the retirement of the existing outdated 1994 circa EAS-SAME schema. A simple modification of the EAS Rules is in order to authorize

EAS-CAP Direct-To-Air before CAP to EAS-SAME equipment is type-accepted and rushed to market to meet the 180-day window under Rule §11.56. To be successful in this effort the following issues must be addressed in a new EAS Rulemaking;

- a). The retirement of the 1994 vintage SAME header/closer concept.
- b). The retirement of the EAS Daisy-Chain off-air monitoring concept carried over from the CONELRAD and EBS era.
- c). A requirement that at least two diverse data source paths for CAP message reception must be present to all Broadcast Radio, TV and Cable Facilities.
- d). Each CAP compliant EAS device must time sync to the national time standard.
- e). Each CAP compliant EAS device must provide intelligent and accurate text crawl to screen for Broadcast TV and Cable Facilities.
- f). Basic CAP reception device specifications should also include RSS output of all CAP data received so that Broadcast and Cable facilities will receive Public Advisories and Statements on events that do not meet the threshold for Activation of the facilities. An RSS output feed will permit automatic delivery to of CAP data to Broadcast and Cable facilities personnel, affiliated websites, email redirects, etc.
- g). The Commission must supply each Broadcast Radio, TV and Cable Facility with 'Licensed Facility Polygon Coordinates' to be permanently programmed in or referenced to thru a USB 'key' on the CAP EAS device to insure that Public Warning Messages transmitted reflect the particular facilities coverage or franchise service area.

- h). A logical transition schedule in which all Broadcast Radio, TV and Cable

  Facilities must began operating a CAP Compliant EAS devices that receives
  and transmits CAP warning messages via a redundant path which could
  include, Satellite, Internet and other data paths detailed in the State's EAS
  Plan.
- i). CAP compliant EAS devices must be required to provide automatic return verification of the receipt of and the transmission of all qualified CAP warning events by Broadcast Radio, TV and Cable Facilities. The IPAWS schema inherit ability for two-way communication to/from disseminator devices can provide a receipt verification that can populate the EOCs CAP Public Warning origination terminal providing verification of the CAP warning message delivery back from each disseminator.
- j). A standardized National, State and County CAP Test schema must be developed so that at least once a month each Federal, State and Local Level CAP Originator has transmitted a CAP message test and received verified responses from the CAP receiver located at all Broadcast and Cable facilities.

### 10. Activating an FCC - EASAC is in the Public Interest

10). Based upon my thirty-eight years of Broadcast Experience, my career long passion for and involvement in creating an effective Public Warning System – and my findings as set forth in this Petition, I urge The Commission to establish an Emergency Alert System Advisory Committee and charge the EASAC with a strict one-year timeline to complete an overall system design concept for a fully CAP Direct-To-Air compliant EAS system in

addition to the necessary proposed EAS-CAP Rules and the EAS-SAME retirement schedule. The EASAC structure should be similar to the Commercial Mobile Service Alert Advisory Committee on which Randy D. Gehman served as a Member.

The Commission established the CMSAAC only after a Congressional mandate via the WARN Act. I believe it would speak well of The Commission's concern for an effective Pubic Warning System by not waiting on yet another Congressional mandate – but instead proceed with the establishment of an EASAC under your own statutory authority.

#### **CONCLUSION:**

With acceptance of this 'Petition' The Commission has a unique opportunity to begin a new proceeding to update the EAS Rules and thereby establish an effective date for EAS-CAP 'direct-to-air' that should coincide with the estimated IPAWS operational status date [2012], the CMAS operational date [2012] and thereby implement a true Next-Generation Emergency Alert System [2012]. Historically, an opportunity to implement true public warning technological advancement has been cyclic, basic twenty-year periods, between the original Commission proceedings that developed and adopted Rules for transition between CONELRAD and EBS 'two-tone' and the EBS 'two-tone' to the existing EAS 'SAME'. With logical action on this Petition by The Commission – a true next-generation Public Warning System advancement from EAS 'SAME' to EAS 'CAP' [direct-to-air] will be the result and this effort can be accomplished within the historical precedent of twenty-year technology advancement cycles.

IF; The Commission does not have the fundamental resolve to take the following actions;

a). Set-aside Rule §11.56 [180 day clock]

b). Initiate a new Next-Generation EAS Rulemaking proceeding

c). Establish an EASAC

THEN; the EAS Rules requiring 'CAP to SAME' translation will insure that;

d). Broadcast and Cable facilities will continue to transmit inaccurate and misleading

EAS-SAME Public Warning information.

e). The 1994 EAS-SAME schema that is currently transmitted over-the-air will not

have been altered or improved in any manner by the previous large proceeding,

EB Docket No. 04-296.

f). Due to the expenditure of capital and goodwill by Licensees to comply with the

existing Rules requiring the purchase and installation of new EAS 'CAP to

SAME' translation equipment – historical precedent clearly shows that there will

be no further improvements in the Broadcast and Cable Public Warning System

for at least the next ten to fifteen years.

RESULT; Doing the EAS 'SAME' thing over and over again and expecting different results

by implementing the 'CAP to SAME' translation as mandated in the Rules - matches

published definitions of insanity.

Respectfully submitted,

November 30, 2009

Randy D. Gehman Gehman Compliance & Consulting

1242 Main Street

Akron, Pennsylvania 17501

Phone: 717-859-6410

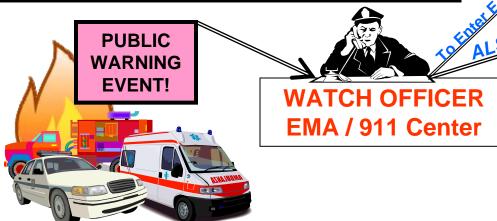
Email: dgehman@gradiotv.com

22

## CAP to SAME – BROADCASTERS' On-Air WILL HAVE 'SAME' FATAL FLAWS!

## **RULEMAKING EXHIBIT 'A'**

**EXISTING EAS SCHEMA 1996** 



MUST SELECT <u>INACCURATE</u> FCC EAS EVENT CODE!

MUST SELECT ENTIRE COUNTY EAS FIPS CODE REGARDLESS OF AREA!



# INACCURATE WARNING TRANSMITTED BY BROADCASTERS DUE TO EAS 'SAME'

- 1). EVENT CODE DOES NOT MATCH WARNING!
- 2). ENTIRE COUNTY FALSELY WARNED!
- 3). TV TEXT CRAWL WILDLY MISSLEADING!
- 4). 30 SECONDS OF AIR-TIME LOST ON 'Duck Quack' 'SPECIFIC AREA MESSAGE ENCODING' AUDIO DATA BURSTS AND TWO-TONE ALERT!
- 5). POOR QUALITY AUDIO MESSAGE RELAYED!



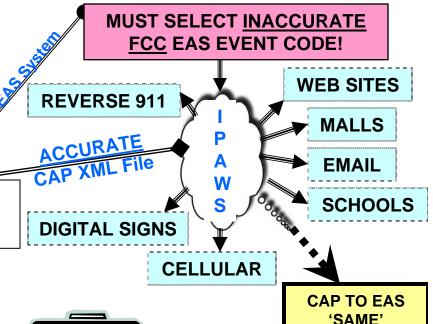
Gehman Compliance & Consulting
1242 Main Street, Akron, PA. 17501
717-859-6410
WWW.GRADIOTV.COM

## CAP to SAME – BROADCASTERS' On-Air WILL HAVE 'SAME' FATAL FLAWS!

## **RULEMAKING EXHIBIT 'B'**

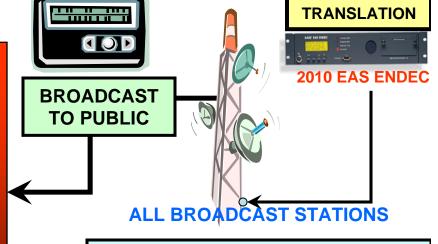
## **CAP to EAS SCHEMA 2010**





# INACCURATE WARNING TRANSMITTED BY BROADCASTERS DUE TO EAS 'SAME'

- 1). EVENT CODE DOES NOT MATCH WARNING!
- 2). ENTIRE COUNTY FALSELY WARNED!
- 3). TV TEXT CRAWL COULD BE ACCURATE DEPENDENT UPON FCC EAS RULE CHANGE!
- 4). 30 SECONDS OF AIR-TIME LOST ON 'Duck Quack' 'SPECIFIC AREA MESSAGE ENCODING' AUDIO DATA BURSTS AND TWO-TONE ALERT!



Gehman Compliance & Consulting
1242 Main Street, Akron, PA. 17501
717-859-6410
WWW.GRADIOTV.COM

## EAS-CAP DIRECT TO 'On-Air' RESOLVES 'EAS-SAME' FATAL FLAWS!

## **RULEMAKING EXHIBIT 'C'**

**CAP to AIR SCHEMA 2012** 



GOV'T AGENCIES

REVERSE 911

ACCURATE CAP
ACCURATE CAP
ACCURATE CAP
A
MALLS

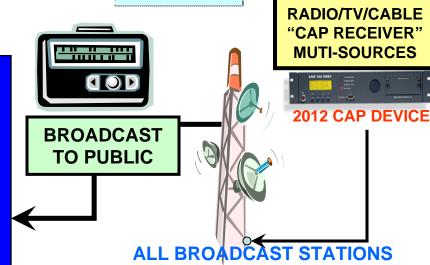
EMAIL
P
NOAA
W
S
HOSPITAL

DIGITAL SIGNS

BROADCASTERS

# ACCURATE WARNING TRANSMITTED BY BROADCASTERS EAS-CAP DIRECT TO-AIR!

- 1). AIRED ONLY IF THE "DESIRED WARNING AREA" POLOYGONE ENCOMPASES ANY OF THE STATION'S LOCAL SERVICE CONTOURS!
- 2). AUDIO MESSAGE AIRED {NO Duck Quacks!}
- 3). TV TEXT CRAWL PULLED <u>DIRECT FROM CAP</u> <u>TEXT FILE</u> TO CHARACTER GENERATOR!
- 4). CAP WARNING FORWARDED INSTANTLY TO STATION'S WEBSITE, EMAIL LIST, TEXTING, ETC.



Gehman Compliance & Consulting
1242 Main Street, Akron, PA. 17501
717-859-6410
WWW.GRADIOTV.COM

## FCC EAS RULEMAKING PETITION EXHIBIT 'D' R. Dale Gehman 11-30-09

#### **FATAL FLAWS – CASE ONE:**

EAS-Specific Area Message Encoding utilizes 'County by County' FIPS Codes and 'stock' Warning Event Codes in order to enter and transmit a Public Warning Message via America's Broadcast Station Daisy-Chain.

Please review 'EXHIBIT ONE' and note the following scenario;

- a). A Public Warning Event occurs with notice required in the City Limits of Estes Park, Colorado. {Desired Warning Area Shown in Red}
- b). Unfortunately, EAS-SAME has no ability to enter a polygon of coordinates to define the actual desired warning area; therefore, the entire County of Larimer, Colorado must be entered into the EAS-SAME string in order to obtain entry into the Broadcast Station Daisy-Chain.
- c). The initial result of the transmission by EAS-SAME of this Public Warning Event in Estes Park, is that any station located in the County of Larimer receives and transmits the warning message; although the warning is totally irrelevant and misleading to 99.9% of the broadcast station's audience. {Actually, there are only two local stations in Estes Park and due to the terrain; other stations in the County can not be received within the City Limits.}
- d). Please review 'EXHBIT TWO' and note that since Broadcast Station's signal contours do not follow County boundaries...the 'bleed over effect' from the single warning event in this scenario would likely spill over into all of the adjacent Counties and even cross over the Colorado/Wyoming border. {Stations adjacent to Larimer County who provide service to any part of the County would typically have the Larimer County FIPS code programmed into their EAS-Decoder.}
- e). In addition to the critical flaws of this warning event detailed in this scenario the Watch Officer who actually originated the Public Warning Event's EAS Message for Estes Park would have had to select one of the 'Stock' EAS Event Codes which in the majority of instance does not match the actual warning event!

<u>For example</u>, if the Public Warning Event was an accident involving a tanker truck loaded with propane in downtown Estes Park – the likely EAS-SAME Event Code selected would have been 'Immediate Evacuation Order' since an EAS-SAME Event Code labeled Propane Tanker Truck Accidents does not exist. This means that the entire County of Larimer would have received an EAS-SAME Encoded Warning coded with the Event Code 'Immediate Evacuation Order' ...creating extreme confusion, dangerous liability to EMA, and becomes yet another False Warning due to EAS-SAME's flawed encoding scheme.

## EAS-SAME ENCODING IS FUNDAMENTALLY FLAWED AND CREATES A PUBLIC WARNING NIGHTMARE!

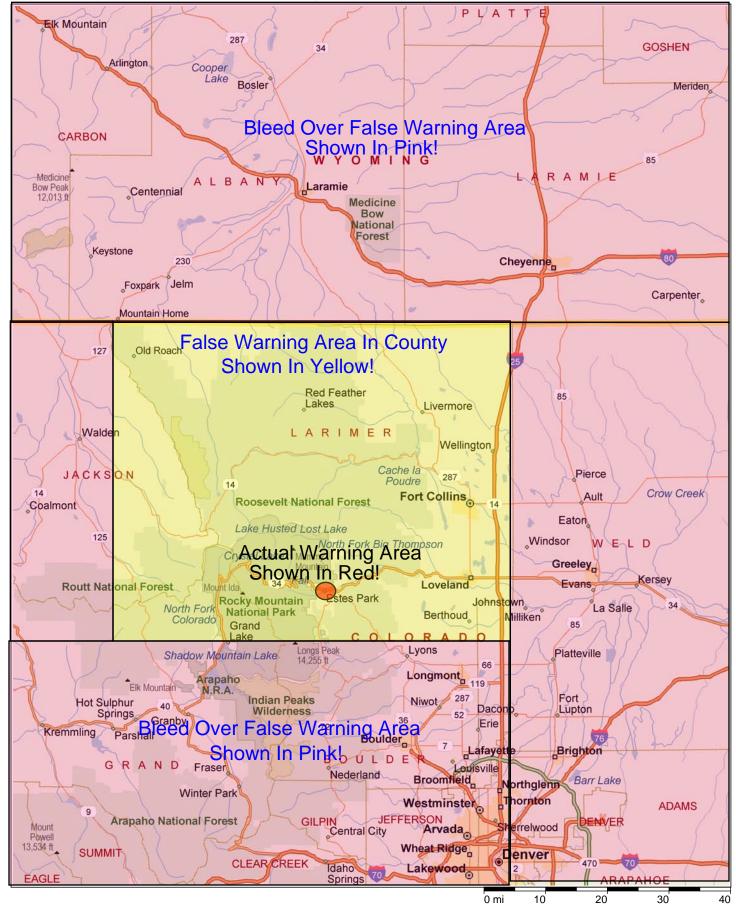
Colorado, United States, North America



Copyright © and (P) 1988–2006 Microsoft Corporation and/or its suppliers. All rights reserved. http://www.microsoft.com/streets/
Portions © 1990–2006 InstallShield Software Corporation. All rights reserved. Certain mapping and direction data © 2005 NAVTEQ. All rights reserved. The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario. NAVTEQ and NAVTEQ on BOARD are trademarks of NAVTEQ. © 2005 Tele Atlas North America, Inc. All rights reserved. Tele Atlas and Tele Atlas North America are trademarks of Tele Atlas, Inc.

## EAS-SAME ENCODING IS FUNADAMENATLLY FLAWED AND CREATES A PUBLIC WARNING NIGHTMARE!

Fort Collins, Colorado, United States



Copyright © and (P) 1988–2006 Microsoft Corporation and/or its suppliers. All rights reserved. http://www.microsoft.com/streets/
Portions © 1990–2006 InstallShield Software Corporation. All rights reserved. Certain mapping and direction data © 2005 NAVTEQ. All rights reserved. The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario. NAVTEQ and NAVTEQ on BOARD are trademarks of NAVTEQ. © 2005 Tele Atlas North America, Inc. All rights reserved. Tele Atlas and Tele Atlas North America are trademarks of Tele Atlas, Inc.

#### FCC EAS RULEMAKING EXHIBIT 'E' R. Dale Gehman 11-30-09

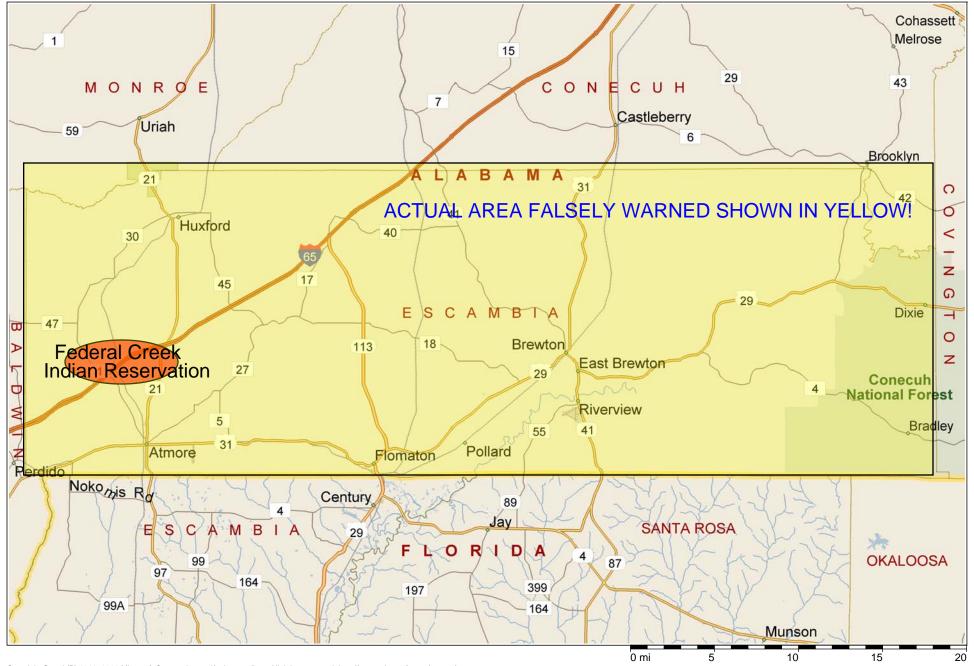
## FATAL FLAWS - CASE TWO - EXHIBITS THREE AND FOUR:

EAS-Specific Area Message Encoding utilizes 'County by County' FIPS Codes and 'stock' Warning Event Codes in order to enter and transmit a Public Warning Message via America's Broadcast Station Daisy-Chain.

## Please review 'EXHIBIT THREE' and note the following scenario;

- a). A Public Warning Event occurs with notice required on the Federal Indian Reservation that I am a Tribal Member of, Poarch Creek Indian Reservation. {Desired Warning Area Shown in Red}
- b). Unfortunately, EAS-SAME has no ability to enter a polygon of coordinates to define the actual desired warning area of the Reservation; therefore, the entire County of Escambia, Alabama must be entered into the EAS-SAME string in order to obtain entry into the Broadcast Station Daisy-Chain.
- c). The initial result of the transmission by EAS-SAME of this Public Warning Event on the Poarch Creek Reservation, is that any station located in the County of Escambia receives and transmits the warning message; although the warning is totally irrelevant and misleading to 99.9% of their audience and only the stations on the West side of the County can be received on the Reservation.
- d). Please review 'EXHBIT FOUR' and note that since Broadcast Station's signal contours do not follow County boundaries...the 'bleed over effect' from the single warning event in this scenario would likely spill over into all of the adjacent Counties and even cross over the Alabama/Florida border. {Stations adjacent to Escambia County who provide service to any part of the County would typically have the Escambia County FIPS code programmed into their EAS-Decoder.}
- e). In addition to the critical flaws of this warning event detailed in this scenario the Watch Officer who actually originated the Public Warning Event's EAS Message for the Poarch Creek Indian Reservation would have had to select one of the 'Stock' EAS Event Codes which in the majority of instance does not match the actual warning event!
- <u>For example</u>, if the Public Warning Event was a sniper on the Reservation the likely EAS-SAME Event Code selected would have been 'Shelter in Place' since an Event Code labeled Sniper on the Reservation does not exist. This means that the entire County of Escambia would have received an EAS-SAME Encoded Warning coded with the Event Code 'Shelter In Place Warning'...creating extreme confusion, dangerous liability to the Tribe, and becomes yet another False Warning due to EAS-SAME's flawed encoding scheme.

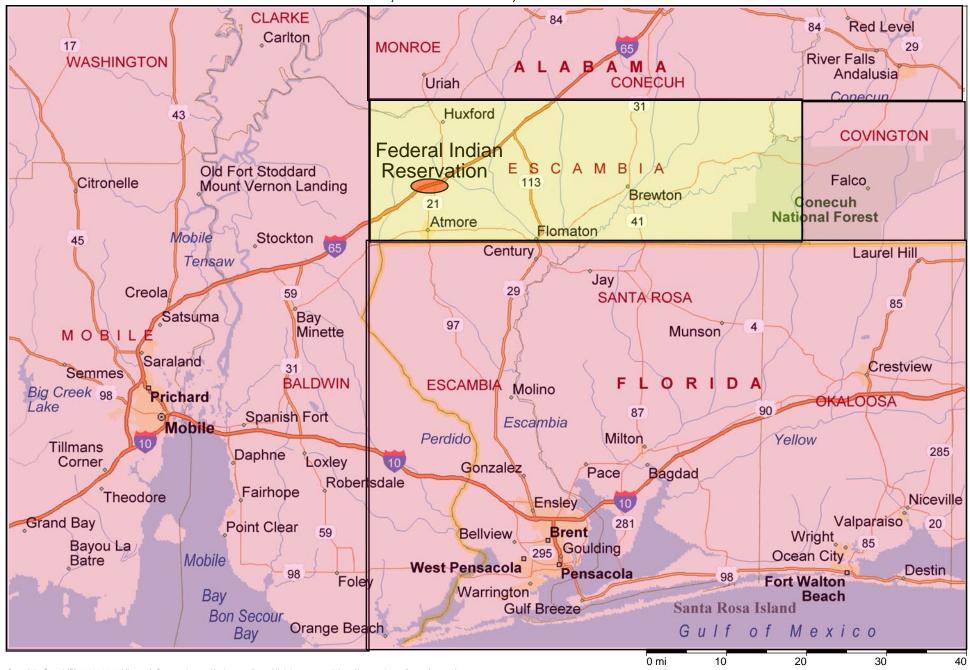
## EAS-SAME ENCODING IS FUNADMENTALLY FLAWED AND CREATES A PUBLIC WARNING NIGHTMARE! Alabama, United States, North America



Copyright © and (P) 1988–2006 Microsoft Corporation and/or its suppliers. All rights reserved. http://www.microsoft.com/streets/
Portions © 1990–2006 InstallShield Software Corporation. All rights reserved. Certain mapping and direction data © 2005 NAVTEQ. All rights reserved. The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario. NAVTEQ and NAVTEQ on BOARD are trademarks of NAVTEQ. © 2005 Tele Atlas North America, Inc. All rights reserved. Tele Atlas and Tele Atlas North America are trademarks of Tele Atlas, Inc.

## EAS-SAME ENCODING IS FUNDAMENTALLY FLAWED AND CREATES A PUBLIC WARNING NIGHTMARE!

Florida, United States, North America



Copyright © and (P) 1988–2006 Microsoft Corporation and/or its suppliers. All rights reserved. http://www.microsoft.com/streets/
Portions © 1990–2006 InstallShield Software Corporation. All rights reserved. Certain mapping and direction data © 2005 NAVTEQ. All rights reserved. The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario. NAVTEQ and NAVTEQ on BOARD are trademarks of NAVTEQ. © 2005 Tele Atlas North America, Inc. All rights reserved. Tele Atlas and Tele Atlas and Tele Atlas and Tele Atlas and Tele Atlas North America are trademarks of Tele Atlas, Inc.